Analytical Solutions for non-Linear Partial Differential Equations

By Ellahi, Rahmat / Zeeshan, Ahmed

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Basics, Concepts and Methods | Nature is abundant with the examples of flows involving non-Newtonian fluids. Such flows are widely encountered in many industrial and technology applications, such as melts of polymers, biological solutions, paints, tars, asphalts and glues etc. Moreover, non-Newtonian nanofluids are also widely encountered in many industrial and technology applications such as nuclear reactors, transportation industry (an automobiles, trucks, and airplanes), micro-electromechanical systems, electronics and instrumentation etc. This book deals an incompressible, non-Newtonian and non-Newtonian nanofluid. It is well known that getting an analytic solution of a nonlinear coupled partial differential equation is often more difficult as compared to getting a numerical solution. This book provides analytical solutions by using the methods like lie algebra, perturbation and homotopy techniques. In many cases solution obtains are compared with each other and existing results. Convergence of the obtained series solutions has been discussed explicitly and the recurrence formulae for finding the coefficients are also given. The role of pertinent parameters is illustrated graphically in each case. | Format: Paperback | Language/Sprache: english | 229 gr | 220x150x8 mm | 160 pp.

READ ONLINE
[1.61 MB]

Reviews

This composed ebook is wonderful. It really is writter in basic words rather than hard to understand. You may like the way the writer compose this pdf.
-- Ryder Nolan

This book can be well worth a go through, and a lot better than other. It is writter in simple words and phrases and not confusing. Its been printed in an exceptionally simple way in fact it is merely right after i finished reading through this pdf by which basically changed me, modify the way i think.
-- Margot Carter V